

Postoperative Rehabilitation Following Ulnar Nerve Transposition

Phase I – Immediate Postoperative Phase (week 0-1)

- Goals: - Allow soft tissue healing of relocated nerve
- Decrease pain and inflammation
 - Retard muscular atrophy

Week 1

1. Posterior splint at 90 degrees elbow flexion with wrist free for motion (sling for comfort)
2. Compression dressing
3. Exercises such as gripping exercises, wrist ROM, shoulder isometrics

Week 2

1. Remove posterior splint for exercise and bathing
2. Progress elbow ROM (PROM 150 to 200)
3. Initiate elbow and wrist isometrics
4. Continue shoulder isometrics

Phase II – Intermediate Phase (weeks 3-7)

- Goals: - Restore full pain free range of motion
- Improve strength, power, and endurance of upper extremity musculature
 - Gradually increase functional demands

Week 3

1. Discontinue posterior splint
2. Progress elbow ROM, emphasize full extension
3. Initiate flexibility exercise for wrist extension/flexion, forearm supination/pronation, and elbow extension/flexion
4. Initiate strengthening exercises for wrist extension/flexion, forearm supination/pronation, elbow extensors/flexors, and a shoulder program

Week 6

1. Continue all exercises listed above
2. Initiate light sport activities

Phase III – Advanced Strengthening Phase (weeks 8-12)

- Goals: - Increase strength, power, and endurance
- Gradually initiate sporting activities

Week 8

1. Initiate eccentric exercise program
2. Initiate plyometric exercise drills
3. Continue shoulder and elbow strengthening and flexibility exercises
4. Initiate interval throwing program

Phase IV – Return to Activity (weeks 12-16)

- Goals – Gradually return to sporting activities

Week 12

1. Return to competitive throwing
2. Continue Thrower's Ten Exercise Program